

Analyzing the Impact of Social Media on Users

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Abstract

In recent years, social media has become more and more popular because it is playing an important role in empowering citizens, organization of community activism, social good and even used for coordination in emergency situations. The social media has become integral part of the current generation. In this study, we aim to analyze the influence of social media on the users. This study indicates that the social media has huge effect on the users. It is very beneficial to the current generation in multiple fields which includes education, E-commerce, marketing / advertisement, communication and social good, however, it also depicts that the information sharing on social media by the users lead to many privacy issues. Therefore, the social media users should be very careful in sharing information as it can be wrongly manipulated.

Keywords: Social Media, Social Network, Impact On users, Facebook, Twitter, Google+, Twitter, LinkedIn.

1. Introduction

The presence of others can easily influence an individual's emotions, feelings, behaviors and attitudes. Any of the actions, real, indirect or imagined, of the individuals which can bring change in physiological states and behaviors are the social impacts [3]. Social media is build on the concept of Web 2.0 and allows users to 1) share personal information / opinion, 2) share knowledge, 3) have discussion and 4) built relationships [3, 5].

Social Media is a new tool for the digital generation and almost all social media applications are internet based. Social media is playing an important role in empowering citizens, organization of community activism, social good and even for the coordination in emergency situations [1-3].

There are different types of social media such as social networking, multimedia sharing, blogs, virtual worlds etc.

There are millions of users who use social media. People prefer social media as it is a great way to stay connected to friends and family across the world. The communication among people is made very easy by the social network. Trends are being changed with the adoption of social media which include new marketing trends, new ways of teaching etc.

The social media has become integral part of the current generation. The new generation grows with social media. The major stats of 2013 presented in [6] shows that the minimum age required by Facebook policy is 13 years, however, there are five million Facebook users under the age of 10 who use Facebook. The total number of Facebook users are over 1.15 billion. There are more than 238 Million users of LinkedIn and more than 130 Million users of Instagram. 42% of users regularly update their LinkedIn profile. Almost 8000 users like any Instagram photo every second.

Mobile device are used by 4.2 billion users to access social media sites. These stats depict the huge usage and importance of social media. This usage has also great impact on the users. There are both advantages and disadvantages of this usage. The advantages include the relation building which has significantly reduced the communication barriers and the new opportunities for businesses. The disadvantages include the privacy issues, addiction to the sites and diminishing of social skills.

In this paper, we analyzed the impact of social media on users and discussed different ways of social media in affecting its users. The research papers relevant to this

research have been analyzed, discussed and a mutual conclusion has been deduced.

The structure of the paper is as follows. First, the literature survey that is relevant to this research work is presented. In Section 2, discussion related to the key points concluded from the related work and different ideas are presented. In the end, the conclusion is drawn which includes the major findings and implications of this study.

2. Literature Review

Social media is one of the most active research area, in the last decade, researchers have analysed different aspects of social media. In this sections, we analysed and discussed existing work related to the impact of social media.

Bresciani Sabrina in [1] emphasized on the importance of social media in doing the social good. According to the authors the ripple effect of social media creates many-to-many communication which introduced completely new ways of communication for the organizations, individuals and businesses. The idea once shared on social media spreads instantly with a chain reaction similar to the ever expanding ripples across water. This quality of social media is considered very useful in many situations e.g. the companies use the users feedback and ideas about the products on the social media to do the improvements. For instance, Author has stated an example of Starbucks in which a community was created for this purpose, rewards were awarded to the users for the feedback and the users were updated regarding the changes done in the product related to their feedback.

Furthermore, according to the authors, there are three main challenges faced by Good-Doers on social media which are: (1) Becoming an initiator (2) Ensuring the information speared using social media platform is correct and not manipulated (3) Addressing cultural differences / cross-cultural misunderstandings. Large and wealthy organizations can keep track of the user conversations / feedbacks and can use this information for other purposes. For example Twitter (a social media application) can be used as emergency reporting system to inform the users whereas this platform can also be used by terrorist organizations to gather real time information.

Chelly Magda in [2] analysed and discussed the role of using social media in education. According to the authors 99% of children participate in online activities whereas only 10% participate in class. In this era, Google, Wikipedia, YouTube, Facebook have become main resources of education. The level of collaboration and

connectivity has become very fast by the use of broadband. The researcher has concluded that the success of social media in education is based on four parameters which are Simplicity, Interactions, Media and Personalization. The authors used the term “virtual campus” which is described as a place where students can 1) find their courses, 2) connect with classmates and 3) get their evaluated (grades). According to the authors, Social media can easily be used to setup virtual campus because it has all the required ingredients.

Kwahk et al in [3] studied the effects of social media on E-commerce. According to the authors, the information gets public as soon as it is uploaded on social media. This information can be browsed by many people which leads to a many-to-many spread of information. Furthermore, the statistics shown in the paper shows that there 70% of people visits regularly the message boards, social networking sites and blogs on social media to get information about a company, product or brand. The research analysis performed by the authors shows that almost half of the people purchase the product on the basis of product information / reviews collected from social media.

Any of the actions, real, indirect or imagined, of the individuals which can bring change in physiological states and behaviours are called social impacts. Normative social influence refers to the affect of social pressure on individual or group to adopt a product / service because if they do not adopt they will be treated as ‘old fashioned’. Informational social influence refer to the affect of indirect internalizing a individual or group [3]; these influences affects consumer behaviour both online and offline. Informational social influence of social media is very high because the information is continuously shared on social media. This influence affects the users’ online behaviour such as purchase intention. According to the authors, the companies should take social media as a tool to build connections between staff and customers as it cost effective and efficient.

According to Tatiana et al [4], the social media websites asks for a lot of personal information from users which leads to privacy issues. These issues occur because the user share this personal information public intentional or unintentionally. According to the authors, the home location of a user can be easily be inferred through simple methods (such as using public information or locatable friends geographic information etc) even the user has set home address as private attribute. Users share a lot of personal information on social websites such as favourite places, studied / work place, interests, views etc. This may lead to the creation of the opportunities for the unauthorized usage of user information. The research concludes that it is

possible to infer the user home city with high accuracy in social media websites (such as Google+, Twitter, Foursquare) and this can lead to critical privacy for many of social media website users.

Hashimoto et al in [5] studied and discussed the effects of rumours on social media, their correctness and validity. People try to acquire information from social media when a disaster occurs and this information affect the decision-making of these people. Social media information is useful as user gets real time updates; however, the information spread on social media might be unreliable (i.e. harmful rumours spread and cause people to panic). According to the Authors, there is a need of a rumour detection mechanism on social media; the authors quoted the example of severe disaster in Japan on 11th March, 2011 the earthquake and the nuclear plant accident. People in the disaster area were acquiring information from TV programs and social media; this information strongly influences people behaviour and decision- making. In this situation, if rumours spread on social media, it will severely impact the affected peoples. The authors gave the example of rumours which spread in Japan on 11th March, 2011; these rumours affected the people of Japan and people reacted accordingly as people started storing products and evacuating places etc.

İrem Eren Erdoğan et al in [7] analysed the impact of Social media marketing on brand loyalty. The interests of consumers are now studied by the companies on social media so that the companies can act accordingly and create new campaigns and services. Social media experts and consultants plays an important role as they analysis the data collected from social media and recommend the companies about new potential offers. The paper concluded that in order to maintain the brand loyalty the company should show user relevant offers or popular contents and also advertise it on various social media platforms.

An agent-based model by Baracaldo et al in [8] was developed to understand the proliferation of privacy issues through the social network connections and the way these issues effect an individual user decisions on the network. The scenario of November 2006 has been studied as an example when MySpace was the largest Online Social Network (OSN) in the world. After having more than 130 million users, MySpace faced a massive departure. This departure is said to be because of privacy issues which aroused when the users majority teenagers of MySpace unconsciously revealed their private information. The disclosure of this information especially teenagers led to incidents in which adolescents were victims of sexual predators.

Smith et al in [9] studied big data privacy issues in public social media; the study shows that only in the last two years the data shared on Facebook per month is from two billion to six billion. According to the authors, the information shared on the social media is so big that it is impossible for user to keep track of all the related shared information. As an example, the authors discussed that one third of the pictures taken by leading camera devices contains GPS information. Thus, about 10% of all the photos shared on social media could harm other peoples' privacy without them knowing about it. The author proposed a Watch-dog service to avoid the privacy issues, this service look for all the users, their metadata and shows it to the user to aware him about the information shared related to him on time. The user can remove the information shared by other users.

According to Ibnualim et al in [10], the communication between doctor and patient is very important in the health domain especially the communication frequency because it affects the patient's recovery. Social media has provided a new way of communication. It can be used as a communication platform between physician and patient. Furthermore, the patients can also communicate with other patients using the same. The authors concluded that the social media can be useful in health domain if the security and confidentiality of patient information is provided in the current social media.

Smith et al in [11] studied and discussed the impact of mobile games available social media on users. According to the authors, users are strongly attracted towards mobile games. Social interaction has introduced many resources in which gaming plays an important role. There are many social networking sites which are very popular among users. There are many designs used for social networking and one of them is social experience design. This design provide different types of satisfaction based on user different emotions. Apple and Google are playing an important role in minimizing errors of social networking. Some design guidelines, limitations and advantages related to different approaches for mobile social game design are discussed in [11].

According to Dugundji et al [12] social network and behaviour play an important role in adopting social media by the users. The authors modelled user behavior in adoption and diffusion of Twitter clients; a competition among four twitter clients for adoption within Indie community was held where the members of community can choose any clients. The competition analysis shows that users prefer twitter clients; the choices varies as user selects his social interaction with respect to one another.

The authors concluded that social media is backbone for Indie community especially Twitter because it provides rapidly posting facility to the users for posting their messages.

Dhir et al in [13] studied the effects of social media on child / teenager and discussed the need for future UbiComp technologies precisely meant for teenage users. In last few years teenagers have been adopting the UbiComp very frequently. Text messages (SMS), instant chat messengers, social networking sites (SNSs), and handheld gaming consoles are some examples. The Teenagers are the main users of SNS. According to authors, Teenagers are concerned about the privacy of their personal information while they are not experts in handling privacy settings. Teenagers made their SNS profiles private, as they are not able to make changes to the SNS privacy settings. The peer pressure is said to be a major contribution in exploiting teenagers' social desire to remain connected with their friends. The children of age group from 9 to 16 also go online through a PC, laptop or through a handheld device which includes mobile phones and gaming consoles, therefore, the authors concluded that future UbiComp technologies should be designed keeping in view the teenage users.

3. Discussion

This survey depicts that current generation is highly affected by the social media. This new way of communication has brought new trends in the world. Authors in [1-3] conclude that the social media has provided a platform for performing old procedures in new ways. It has become easier to raise voice which leads to community activism and for empowering citizens. Social media can even be helpful for coordinating in emergency situations as the ripple effect discussed in [1] defined a many-to-many communication mechanism which social media has brought in the current era. The authors have stated an example of China earthquakes where Twitter was used by a Rapid Response News Service. In this scenario, users in the affected area upload their information using which the map of the environment is generated in real time for the rescue teams. This instant communication mechanism can also be used in the establishing health social media as described in [10]. The health social media can be useful if privacy issues related to patient health information and medical data is ensured.

Users are adopting new mechanisms of learning and teaching which is through blogs, social networking sites and multimedia sites. Authors in [3] discussed the new trends in the field of education; these trends brings a

positive impact on the users. New trends are being introduced due to the presence of social media; Authors in [2], discussed that the managers in e-commerce are adopting new trends of social media for interacting with the users, getting user feedback and product marketing.

E-commerce related issue has been highlighted in [7] where the social media is considered to be a platform which can be helpful in maintaining brand loyalty. Advantageous campaigns, relevant contents offered by brand play crucial role in increasing brand loyalty of customers. Authors in [1, 3] have emphasized on the creation of a new designation (social media consultant) whose major focus is on the analysis of social media trends, consumers interests and taking appropriate action accordingly.

On the other hand, the flow of information throughout the world is also introducing new security holes and critical privacy leaks. The security of an individual may be at risk due to the involvement of social media. Authors in [4] reveals that it is possible to identify the current location of a user through the analysis of the information provided by user on the social media sites. This information can be in the form of Check-in made in any restaurant (or any other venue) or it can be a tweet on Twitter which has geographical coordinates enable on the profile address information. This information can be misused against any individual. Another major negative impact of social media on users is the flow of wrong information which may lead to misconceptions and confusions. As discussed in [5] that in case of any unusual circumstances users try to acquire information from social media and it affects their decision-making. As there is no mechanism to detect the validity of the information uploaded on the social media, users may lead to wrong decision. The information on social media is occasionally unreliable and rumours may spread and cause people to panic.

The studies in [4, 8, 9] shows that the geo-location feature of social media is a big threat to a user's privacy. The tagging feature links users to each other, this linkage helps the metadata to be extracted easily and manipulated. [9] Focuses on the point that because of large amount of data it is impossible to maintain the privacy of users. With big data a new threat arises which is related to the non-tagging. User will never be able to know that any content related to him has been shared and uploaded on social media as there will be no linkage.

The teenagers get affected by social media as they are unaware of the critical consequences of social media privacy holes. This issue has been discussed both in [8] and [13]. The disclosure of teenagers' information led to

incidents in which adolescents were victims of sexual predators.

This survey tells that social media has brought lot of benefits in the life of mankind and has made lives easier by introducing new trends but this can be at the same time harmful if not used properly. The information can be unreliable therefore social media must not be used for the acquiring of news. User must also be careful while uploading information on the social media sites as security issues may arise as soon as information gets uploaded.

4. Conclusion

It can be concluded that social media has huge effect on this generation. This new way of communication has made world a global village and introduced new trends which can be new learning and teaching methods in field of education or new marketing trends for the products to be introduced to the customers. The social media is also helpful in doing the social good in the form of organizing community activism, for empowering citizens, and for coordinating in emergency situations. It is also concluded that the users should be careful while uploading information on the social media as it can cause privacy and security issues. The information on the social media can also be unreliable which may lead to wrong decisions.

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